

WHAT IS CLAIMED IS:

1. An image formation apparatus comprising:
an image carrying member;
charging means for being applied with a voltage including an AC voltage component and coming into contact with the face of said image carrying member so as to charge said image carrying member;
developing means for visualizing an electrostatic latent image formed on said image carrying member into a developing agent image with a developing agent;
transfer means for transferring said developing agent image onto a transfer member; and
developing agent charging means for charging developing agent remaining on said image carrying member following said transfer;
wherein said developing agent charging means is upstream in the direction of motion of image carrying member as to said charging means and downstream from said transfer means;
and wherein application of said AC voltage to said charging means is started before a portion on said image carrying means, where application of voltage to said developing agent charging means has started, reaches a position of coming into contact with said charging means;

and wherein ending of application of said AC voltage to said charging means ends after a portion on said image carrying means, where application of voltage to said developing agent charging means has ended, reaches a position of coming into contact with said charging means.

2. An image formation apparatus according to Claim 1, wherein said AC voltage has an inter-peak voltage of twice or more the discharge starting voltage between said image carrying member and said charging means.

3. An image formation apparatus according to Claim 1, wherein said developing agent charging means comprise electroconductive brush-shaped members coming into contact with said image carrying member.

4. An image formation apparatus according to Claim 1, wherein said developing means perform contact developing wherein said developing agent comes into contact with said image carrying member.

5. An image formation apparatus according to Claim 1, wherein said developing agent is a two-component developing agent of toner and magnetic carrier.

6. An image formation apparatus according to Claim 1, wherein said developing agent carrying means comprise:

first developing agent carrying means situated downstream in the direction of motion of said image carrying member from said transfer means and upstream from said charging means; and

second developing agent carrying means situated downstream in the direction of motion of said image carrying member from said first developing agent carrying means and upstream from said charging means;

wherein said first developing agent carrying means apply voltage of inverse polarity to the regular polarity of the developing agent, and said second developing agent carrying means apply regular polarity voltage of the developing agent.

7. An image formation apparatus according to Claim 1, wherein developing agent remaining on said image carrying member following transfer is collected by said developing means using an electric field.

8. An image formation apparatus according to Claim 1, wherein developing agent remaining on said image carrying member following transfer is collected by said transfer means using an electric field.

9. An image formation apparatus according to Claim 1, wherein DC voltage and AC voltage is superimposed on said charging means, with the order of starting application of voltage being in the order of AC voltage and then DC voltage, and with the order of ending application of voltage being in the order of DC voltage and then AC voltage.